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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,413

Applicant(s)

ENGEL ET AL.

Examiner

CHARLES HICKS

Art Unit

2629

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-37, 52-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-37 and 52-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date _____
- 6) ☐ Other: _____

DETAILED ACTION

This communication is responsive to amendments filed with the Request for Continued Examination filed 03/30/2010. Claims 38-51 have been cancelled. Claims 25 and 52 have been amended. Claims 25-37 and 52-65 are currently pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 25-33 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762) in view of Jiang et al. (US 6,573,961).

In reference to claim 25, Witehira teaches a multi-component display (Witehira, Abstract, multi-levels of screens),

comprising: a first display screen comprising a first plurality of pixels, wherein said first display screen is operable to display a first image using said first plurality of pixels (Witehira, Fig. 4, color display screen 1);

and a second display screen comprising a second plurality of pixels, wherein said second display screen is operable to display a second image using said second plurality of pixels, wherein said second display screen overlaps said first display screen (Witehira, Fig. 4, color display screen 3).

Witehira however fails to teach wherein a first pixel of said first plurality of pixels comprises a first plurality of sub-pixels arranged in a first pattern; and wherein a second pixel of said second plurality of pixels comprises a second plurality of sub-pixels arranged in a second pattern, and wherein said second pattern is different from said first pattern.

Jiang discloses a stacked display panel, analogous in art with that of Witehira, wherein a first pixel of a first plurality of pixels comprises a first plurality of sub-pixels arranged in a first pattern; and wherein a second pixel of a second plurality of pixels comprises a second plurality of sub-pixels arranged in a second pattern, and wherein said second pattern is different from said first pattern (Jiang, Fig. 16A, 16B, 16C; col. 48, ll. 50-52; col. 49, ll. 7-22).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the pixels comprised in the stacked display of Witehira,

wherein a first pixel of the first plurality of pixels comprises a first plurality of sub-pixels arranged in a first pattern; and wherein a second pixel of the second plurality of pixels comprises a second plurality of sub-pixels arranged in a second pattern, and wherein said second pattern is different from said first pattern, as taught by Jiang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been color displays having three linear sub-pixels with three primary colors or with four sub-pixels of white, blue, green, and red in a pixel with two colors in a top row and two colors on a bottom row can be made with two colors per layer in two layer stacks, the pixels in the display arranged such that multiple adjacent sub-pixels in a layer, or row in a layer, with the same color, making the color filters easier to manufacture. (Jiang, Abstract).

Claim 26 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira as modified by Jiang teaches wherein said first plurality of pixels are arranged in a first tessellated pixel pattern, and wherein said second plurality of pixels are arranged in a second tessellated pixel pattern (Witehira, Fig. 4).

Claim 27 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira as modified by Jiang teaches wherein said first plurality of pixels are arranged in a third pattern, and wherein said second plurality of pixels are arranged in a fourth pattern (Witehira, col. 5, ll. 14-16).

Claims 28 and 29 are rejected as being dependent on rejected claim 25 as discussed above and further, Witehira as modified by Jiang teaches wherein said first display screen, and second display screen are selected from a group consisting of a liquid crystal display, a light emitting diode display, an organic light emitting diode display and a projection display device (Witehira, col. 2, ll. 14-19).

Claim 30 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira as modified by Jiang teaches further comprising: at least one interstitial layer disposed between said first and second display screens (Witehira, Fig. 4, item 13).

Claim 31 is rejected as being dependent on rejected claim 30 as discussed above and further, Witehira as modified by Jiang teaches wherein said at least one interstitial layer comprises a diffuser (Witehira, Fig. 4, item 13).

Claim 32 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira as modified by Jiang teaches further comprising: a component operable to generate light to illuminate said first image and said second image (Witehira, col. 4, ll. 50-56).

Claim 33 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira as modified by Jiang teaches wherein a first pixel of said

plurality of pixels has a first shape, and wherein a second pixel of said second plurality of pixels has a second shape (Witehira, Fig. 4).

Claim 37 is rejected as being dependent on rejected claim 25 as discussed above, and further, Witehira however fails to teach wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern.

Jiang discloses display pixels, analogous in art with that of Witehira wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern (Jiang, Fig. 1A; col. 3, ll. 25-29).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the display pixels of Witehira wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern, as taught by Jiang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to improve the light transmission efficiency and output brightness of a display panel (Jiang, col. 3, ll. 34-39).

Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762) modified by Jiang et al. (US 6,573,961) and further in view of Liang et al. (US 7,072,095).

Claim 34 is rejected as being dependent on rejected claim 25 as discussed above and further Witehira as modified by Jiang however fails to teach wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature.

Liang discloses pixel shapes, analogous in art with that of Witehira, wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the pixel shapes of Witehira as modified by Jiang wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claim 35 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira as modified by Jiang however fails to teach wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape.

Liang discloses sub-pixel shapes, analogous in art with that of Witehira, wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the sub-pixel shapes of Witehira as modified by Jiang wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claim 36 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira as modified by Jiang however fails to teach wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature.

Liang discloses sub-pixel shapes, analogous in art with that of Witehira, wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the sub-pixel shapes of Witehira as modified by Jiang wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claims 52-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762) in view of Huston (US 2002/0154102).

In reference to claim 52, Witehira teaches a multi-component display (Witehira, Abstract, multi-levels of screens),

comprising: a first display screen comprising a first plurality of pixels, wherein said first display screen is operable to display a first image using said first plurality of pixels, and wherein said first display screen utilizes a first display technology (Witehira, Fig. 4, color display screen 1);

a second display screen comprising a second plurality of pixels, wherein said second display screen is operable to display a second image using said second plurality of pixels, wherein said second display screen overlaps said first display screen, wherein said second display screen utilizes a second display technology (Witehira, Fig. 4, color display screen 3).

Witehira however fails to teach wherein said second display technology is different from said first display technology.

Huston discloses a display controller for multiple display technologies, analogous in art with that of Witehira, wherein a second display technology is different from a first display technology (Huston, pg. 2, par. 19, LCD, CRT, OLED, Plasma, Ferroelectric).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the first and second display screen technologies of Witehira, wherein said second display technology is different from said first display technology, as taught by Huston.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to present image data in a stereoscopic format in accordance with user-specific instructions for display modules featuring LCD, CRT, OLED, Plasma and/or Ferroelectric technologies (Huston, pg. 2, par. 19).

Claim 53 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira as modified by Huston teaches wherein said first plurality of

pixels are arranged in a first tessellated pixel pattern, and wherein said second plurality of pixels are arranged in a second tessellated pixel pattern (Witehira, Fig. 4).

Claim 54 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira as modified by Huston teaches wherein said first plurality of pixels are arranged in a first pattern, and wherein said second plurality of pixels are arranged in a second pattern (Witehira, Fig. 4).

Claims 55 and 56 are rejected as being dependent on rejected claim 52 as discussed above and further, Witehira as modified by Huston teaches wherein said first display technology, and second display technology, are selected from a group consisting of a liquid crystal display, a light emitting diode display, an organic diode display and a projection display device (Witehira, col. 2, ll. 14-19).

Claim 57 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira as modified by Huston teaches further comprising: at least one interstitial layer disposed between said first and second display screens (Witehira, Fig. 4, item 13).

Claim 58 is rejected as being dependent on rejected claim 57 as discussed above and further, Witehira as modified by Huston teaches wherein said at least one interstitial layer comprises a diffuser (Witehira, Fig. 4, item 13).

Claim 59 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira as modified by Huston teaches further comprising: a component operable to generate light to illuminate said first image and said second image (Witehira, col. 4, ll. 50-56).

Claim 60 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira as modified by Huston teaches wherein a first pixel of said plurality of pixels has a first shape, and wherein a second pixel of said second plurality of pixels has a second shape (Witehira, Fig. 4).

Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762) modified by Huston (US 2002/0154102) and further in view of Liang et al. (US 7,072,095).

Claim 61 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira as modified by Huston however fails to teach wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature.

Liang discloses pixel shapes, analogous in art with that of Witehira modified by Huston, wherein a first pixel of said plurality of pixels has a border with a first

curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the pixel shapes of Witehira as modified by Huston wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claims 62 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762) modified by Huston (US 2002/0154102) and further in view of Jiang et al. (US 6,573,961).

Claim 62 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira as modified by Huston teaches a plurality of first color pixels, and plurality of second color pixels (Witehira, Fig. 4; col. 5, ll. 59-63, color pixels).

Witehira as modified by Huston however fails to disclose wherein said first plurality of pixels comprises a first plurality of sub-pixels, and wherein said second plurality of pixels comprises a second plurality of sub-pixels.

Jiang discloses a stacked display panel, analogous in art with that of Witehira as modified by Huston, wherein a first plurality of pixels comprises a first plurality of sub-pixels, and wherein a second plurality of pixels comprises a second plurality of sub-pixels (Jiang, Fig. 16A, 16B, 16C; col. 48, ll. 50-52; col. 49, ll. 7-22).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the pixels comprised in the stacked display of Witehira as modified by Huston, wherein the first plurality of pixels comprises a first plurality of sub-pixels, and wherein the second plurality of pixels comprises a second plurality of sub-pixels, as taught by Jiang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been color displays having three linear sub-pixels with three primary colors or with four sub-pixels of white, blue, green, and red in a pixel with two colors in a top row and two colors on a bottom row can be made with two colors per layer in two layer stacks, the pixels in the display arranged such that multiple adjacent sub-pixels in a layer, or row in a layer, with the same color, making the color filters easier to manufacture. (Jiang, Abstract).

Claim 65 is rejected as being dependent on rejected claim 52 as discussed above, and further, Witehira as modified by Huston however fails to teach wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern.

Jiang discloses display pixels, analogous in art with that of Witehira as modified by Huston wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern (Jiang, Fig. 1A; col. 3, ll. 25-29).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the display pixels of Witehira as modified by Huston wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern, as taught by Jiang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to improve the light transmission efficiency and output brightness of a display panel (Jiang, col. 3, ll. 34-39).

Claims 63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762) modified by Huston (US 2002/0154102) and Jiang et al. (US 6,573,961) and further in view of Liang et al. (US 7,072,095).

Claim 63 is rejected as being dependent on rejected claim 62 as discussed above and further, Witehira as modified by Huston and Jiang however fails to teach wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape.

Liang discloses sub-pixel shapes, analogous in art with that of Witehira as modified by Huston and Jiang, wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the sub-pixel shapes of Witehira as modified by Huston and Jiang wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claim 64 is rejected as being dependent on rejected claim 62 as discussed above and further, Witehira as modified by Huston and Jiang however fails to teach wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature.

Liang discloses sub-pixel shapes, analogous in art with that of Witehira as modified by Huston and Jiang, wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said

second plurality of sub-pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the sub-pixel shapes of Witehira as modified by Huston and Jiang wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Response to Arguments

Applicant's arguments with respect to claims 25 and 52 have been considered but are moot in view of the new ground(s) of rejection.

In reference to claim 52 applicants argue on page 10 of applicants response that the cited prior art of record fails to teach or suggest "wherein said first display screen utilizes a first display technology", "wherein said second display screen utilizes a second display technology" and "wherein said second display technology is different from said first display technology".

Witehira teaches a stacked display screen utilizing a first display technology (Witehira, Fig. 4, color display screen 1), and a second display screen utilizing a second

display technology (Witehira, Fig. 4, color display screen 3). Further, Huston teaches a display controller for multiple display technologies wherein a second display technology is different from a first display technology (Huston, pg. 2, par. 19).

Witehira discloses multiple displays stacked on top of each other, each utilizing a technology for displaying input data. Huston discloses a display controller operable to process input data to be displayed on multiple displays using multiple display technologies including LCD, CRT, OLED, Plasma, Ferroelectric and other display technologies. At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the stacked displays of Witehira to include the display controller of Huston such that different display technologies are used on the various displays, in order to present image data in a stereoscopic format in accordance with user-specific instructions for display modules (Huston, pg. 2, par. 19).

Therefore, Witehira as modified by Huston teaches "wherein said first display screen utilizes a first display technology", "wherein said second display screen utilizes a second display technology" and "wherein said second display technology is different from said first display technology".

In reference to claim 25 applicants argue on pages 10-11 of applicants response that the cited prior art of record fails to teach or suggest "a first display screen comprising a first plurality of pixels", "wherein a first pixel of said first plurality of pixels comprises a first plurality of sub-pixels arranged in a first pattern", "a second display screen comprising a second plurality of pixels", "wherein a second pixel of said second

plurality of pixels comprises a second plurality of sub-pixels arranged in a second pattern" and "wherein said second pattern is different from said first pattern".

Witehira teaches a first display screen comprising a first plurality of pixels, wherein said first display screen is operable to display a first image using said first plurality of pixels (Witehira, Fig. 4, color display screen 1); and a second display screen comprising a second plurality of pixels, wherein said second display screen is operable to display a second image using said second plurality of pixels, wherein said second display screen overlaps said first display screen (Witehira, Fig. 4, color display screen 3). Further, Jiang teaches a stacked display panel wherein a first pixel of a first plurality of pixels comprises a first plurality of sub-pixels arranged in a first pattern; and wherein a second pixel of a second plurality of pixels comprises a second plurality of sub-pixels arranged in a second pattern, and wherein said second pattern is different from said first pattern (Jiang, Fig. 16A, 16B, 16C; col. 48, ll. 50-52; col. 49, ll. 7-22).

Witehira discloses a multi-component display comprising a first display and first plurality of pixels, and a second display and second plurality of pixels. Jiang discloses a stacked display, each display comprising a plurality of pixels made up of a plurality of sub-pixels wherein the sub-pixel patterns are different. At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the pixels comprising the stacked display of Witehira, wherein a first pixel of a first plurality of pixels comprises a first plurality of sub-pixels arranged in a first pattern; and wherein a second pixel of a second plurality of pixels comprises a second plurality of sub-pixels arranged in a second pattern, and wherein said second pattern is different from said first

pattern, in order to provide color displays having three linear sub-pixels with three primary colors or with four sub-pixels of white, blue, green, and red in a pixel with two colors in a top row and two colors on a bottom row can be made with two colors per layer in two layer stacks, the pixels in the display arranged such that multiple adjacent sub-pixels in a layer, or row in a layer, with the same color, making the color filters easier to manufacture (Jiang, Abstract).

Therefore, Witehira as modified by Jiang teaches "a first display screen comprising a first plurality of pixels", "wherein a first pixel of said first plurality of pixels comprises a first plurality of sub-pixels arranged in a first pattern", "a second display screen comprising a second plurality of pixels", "wherein a second pixel of said second plurality of pixels comprises a second plurality of sub-pixels arranged in a second pattern" and "wherein said second pattern is different from said first pattern".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES HICKS whose telephone number is 571-270-7535. The examiner can normally be reached on Monday-Thursday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz, can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://portal.uspto.gov/external/portal>.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629